

Abstract

A process for video content analysis to enable productive surveillance, intelligence extraction, and timely investigations using large volumes of video data. The process for video analysis includes: automatic detection of key split and merge events from video streams typical of those found in area security and surveillance environments; and the efficient coding and insertion of necessary analysis metadata into the video streams. The process supports the analysis of both live and archived video from multiple streams for detecting and tracking the objects in a way to extract key split and merge behaviors to detect events. Information about the camera, scene, objects and events whether measured or inferred, are embedded in the video stream as metadata so the information will stay intact when the original video is edited, cut, and repurposed.